to-day near Samara. Rooks, Crows, Jackdaws, and Starlings were also very numerous.

June 11th.—This day we reached Moscow, and it seemed curious to see, in the city itself, such birds as the Grey Crow and the Black Kite (M. migrans), neither of which were uncommon.

I was disappointed on my journey in not seeing any Thrushes, for I have always looked on Siberia as a stronghold of that family in the breeding-season; no doubt they keep well within the forests at this time of year, which accounts for my failure to observe them.

In conclusion I may say that the climatic conditions were very much the same throughout the journey as they are in Great Britain at the same time of the year, except that at Vladivostok it was abominably hot. I did, however, observe once in Manchuria, and once again in Siberia, some patches of unthawed snow near the railway line.

## XX.—Field-Notes on Vultures and Eagles. By Brigadier-General H. R. Kelham, C.B., M.B.O.U.

COLONEL WILLOUGHBY VERNER'S interesting work on the Wild Birds of Spain recalls to me birds'-nesting days near Gibraltar as far back as 1873, including the finding of nests of the Egyptian Vulture (Neophron percnopterus) and Bonelli's Eagle (Nisaëtus fasciatus), a description of which may be worth recording.

On reference to an old note-book I find:-

"Gibraltar, 15th April, 1873.—This has been one of many delightful days in the cork woods, birds'-nesting with Savile Reid, R.E.

"A short time ago, while hunting with the Calpe Hounds, we noticed Egyptian Vultures and a pair of Bonelli's Eagles sailing about some crags a few miles from the town of San Roque. To-day we revisited the spot.

"Riding up a sandy ravine, the steep scrub-clad hills on

each side crowned by masses of precipitous rock, we disturbed a pair of Egyptian Vultures from what was evidently a nesting-place—a small cave in the face of a perpendicular and much weather-worn cliff standing like a ruined castle on the summit of the hillside. A scramble through the bushes and we soon reached the foot of the cliff, the cave not twenty feet above us; moreover, there was an easy way round to where a conveniently situated fig-tree offered a secure fastening for our rope, up which I climbed, as owing to the overhanging rock the place was more easily accessible from below than from above.

"The nest was on the floor of the cave and consisted of an untidy mass of sticks roughly lined with rags and bits of rubbish and goats' hair, while scattered around were bones, pieces of goat-skin, and other very evil-smelling remains.

"In the nest lay one large egg, the bluish-white ground-colour almost obscured by smudges and blotches of rich chocolate-brown.

"On the 25th April I took another egg from the same nest, and yet a third on the 8th May, all similar in appearance.

"The usual complement is two, a third is, I think, unusual."

The allied Indian species (Neophron ginginianus) I found common among the Outer Himalayas, especially round Dagshai, Sabathu, and the neighbouring hill-stations, at an elevation of about 7000 feet; apparently it is more rare at greater altitudes, anyhow during many expeditions into the high snow-ranges at Kashmir and Baltistan I saw but one, and that late in the summer.

Within a few hundred yards of the Neophron's nest, the finding of which I have described, but on the opposite side of the ravine, we discovered the eyrie of a Bonelli's Eagle.

It was very easy of access from the flat hilltop above, for a descent of about ten feet landed us on the ledge of a rock where the nest lay, in fact almost in the mass of sticks, which was lined with green leaves. It contained two handsome eggs, dull white with a few faint reddish blotches. The date was early in April, about the 8th or 10th.

From his description I gather that both these nests were

discovered next year (1874) by Colonel Verner, in the same ravine though apparently not in quite the same sites.

On 28th Nov., 1886, while wild-fowl shooting at Mornie Tal, a lake at the foot of the Simla Hills, thirty miles east of Kalka, a Bonelli's Eagle suddenly swooped down and seized one of my wounded ducks, and would have carried it off if I had not shot the Eagle.

I also obtained *Nisaetus fasciatus* near Candia in Crete during November, 1896.

During many years spent in Northern India, among the outer ranges of the Himalayas after Chamois, or Gooral, as they are there called, with several expeditions into the higher ranges of Kashmir and Baltistan stalking Ibex, there was no bird I saw more of than the Great Bearded Vulture, or Lammergeyer (Gypaëtus barbatus). Everywhere throughout the hills at an elevation of from 4000 to 8000 feet it was plentiful, especially round Dagshai\*, Kasauli, and Sabathu, during the winter; I frequently saw it, in company with the white-backed Gyps bengalensis, feeding on the refuse from the slaughter-houses. I much doubt if it kills prey for itself, anyhow I never even heard of it doing so.

In Kashmir I used to watch the birds for hours and often saw them pass over flocks of goats, and on more than one occasion pass and repass female Ibex with young kids without taking any notice of them, nor did the animals shew the slightest alarm, which they certainly would have done if the birds had been a source of danger.

During a winter spent at Dagshai the Lammergeyers were always with us, and though they used to sail along the hill-side, often within a few yards of the fowls and pigeons which fed in our Mess Compound, I never saw any hostile act, though they would pick up bones or fragments of meat.

The soldiers, in fact most non-ornithological Europeans, invariably talked of these birds as Golden Eagles, misled by the ruddy buff colour of the head and neck of the mature specimens, which gives them a decidedly golden appearance.

<sup>\*</sup> Dagshai is a small military station in the Outer Himalayas, thirty miles south of Simla.

On the wing the Lammergeyer is easily identified, even at a considerable distance, by its long pointed wings, very wedge-shaped tail, and even, gliding flight—an occasional flap, and with scarcely another movement of its wings it sails along, skimming close over the ground, following every undulation of the hillside as it works backwards and forwards in long "beats," and searching every fold of the ground for food.

During the spring I found it numerous in the Murree Hills (10,000 feet), and I knew of a nesting-place in Changla Gully. In my diary is:—

"Changla Gully, N.W. Himalayas, 4th May, 1896. This evening the sunset was glorious beyond description, the sun sinking in a glow of light over the 'perpetual snows' of Kashmir, crimson, fading to rose, purple, and every conceivable tint, while brilliant flashes of lightning played round the snowy summit of Nanga Parbat (27,000 feet) and other Himalayan giants. The Great Bearded Vulture is quite in keeping with this grand scenery. This evening while sitting among the highest peaks round Changla, admiring the view, several of these huge birds came sailing close past me: my dog seemed to excite them, for many, as they swooped by, uttered hoarse croaks, others settled on a dead pine close below, in fact they were unusually confiding and gave me an exceptional chance of studying them."

They breed early in the year in caves on the face of the most inaccessible crags, often where the cliff is overhanging, so that the approach from above is almost as difficult as that from below.

During the winter of 1887, while chamois-stalking among the Sirmoor mountains, I found several nesting-places, and in the early spring of the next year three pairs of these birds bred in some very precipitous cliffs twelve miles east of Dagshai, where they doubtless still nest. These cliffs were very "happy hunting-grounds" of mine. One January day, dull and snowy, I was stalking chamois, and when in rather a fix, on a very nasty piece of cliff, discovered a Bearded Vulture's eyrie. At the time I was near a huge beetling crag, in a crevice of which was the nesting-place: it was

apparently, at least without ropes and careful arrangements, perfectly inaccessible from either above or below.

According to my shikari, the Vultures breed in April; but I think that the nest contained eggs on this occasion, the 18th of January, as a magnificent golden-headed bird came sailing along the face of the cliff and disappeared into the cave, which had evidently been used for years, the rocks being much soiled by the birds and their young.

During the summer, after the snow has melted, they spread over the higher ranges, and I saw them far north, in Baltistan, Astor, and nearly to Gilgit, but not in such numbers as among the Outer Himalayas. Westward, I saw them among the Afghan Hills, and in March 1889 there were several about the cliffs overlooking Ali Musjid, in the Khyber Pass.

The Brown Vulture (Gyps indicus) and the white-backed G. bengalensis were both common round Dagshai and bred near that place, where on one occasion I had a great Vulture-afternoon—quite an "At Home, from 3 to 5 r.m." I placed a carcase on the hillside, hid near and had a close view of the scene which ensued. At first only a few stray Vultures were visible soaring above, some comparatively low down, others tiny specks high up against the blue sky. As usual, the Kites and Crows were the first arrivals, and by the noise and commotion they made I think attracted the attention of the Vultures.

Anyhow I came to the conclusion that the carcase was first discovered by the lower stratum of Vultures either by sight or else by noticing the gathering together of the clamoring Crows. Then other Vultures observing from the manner of the discoverers that they were off to something good, flocked towards them, others still higher up, still farther away, followed suit, the dark specks high up in the clouds descended nearer and nearer, till in a short time the carcase was alive with a struggling, squabbling mass of these huge birds.

A more rare species, the Black Vulture (Otogyps calvus), I found undoubtedly breeding among the Murree Hills in

May, also in the wooded valleys of Sirmoor, forty miles east of Simla.

"Sirmoor, 15th April, 1887. While big-game shooting, I to-day crossed the Jellal River and ascended a thickly-wooded ridge separating it from the next valley.

"At the head of a jungly ravine and overhanging its steep banks I came on a tree, of no great height, with a huge nest on its top.

"The nest was only about thirty feet from the ground, and standing on the hillside above I could look down right into it, having a good view of the owner. It was a Black Vulture, sitting very close, in fact it was only when I shouted and threw sticks that it could be induced to move; then, standing up, it opened its beak and spread its wings by way of intimidation, at the same time disclosing to view one large white egg on which it had been sitting. The tree was by no means easy to climb, being covered with a tangled mass of wild vine, to say nothing of being alive with red ants, which, to my detriment, resented being disturbed."

The nest, built in the crown of the tree, was an enormous mass of sticks with finer ones as a rough lining. The large, round, white egg—the full complement—was very nearly hatched.

During February of the next year I found the Black Vulture in the Nepal Terai, and saw an individual, in company with the common brown species, feeding on the carcase of a bear which I had shot.

XXI.—On the Occurrence of Pseudoscolopax taczanowskii in Western Siberia. By H. E. Dresser.

## (Plate VII.)

THE Semipalmated Snipe, or so-called "Snipe-billed Godwit," is certainly one of the rarest and least known of the Palæarctic Waders, and up to the present time its breeding-range has been undiscovered. First described by Blyth in 1848 as